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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,152	04/16/2004	Ross Heggstad	2316.1828US01	8588
7590 Steven C. Bruess Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			EXAMINER RAHLL, JERRY T	
			ART UNIT 2874	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/21/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/826,152	Applicant(s) HEGGESTAD ET AL.	
	Examiner Jerry T. Rahl	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 12-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/14/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on December 14, 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,556,738 to Pfeiffer et al. in view of U.S. Patent No. 6,263,136 to Jennings et al.

5. Regarding Claim 1, Pfeiffer et al. describes a fiber optic connection panel having a chassis (70) defining an interior and a plurality of circuit modules (10) mounted in the chassis having an input port (110b) positioned on a rear face (94), an output port (110a) positioned on the rear face, two input ports (106a, 106d) positioned on a front face (92), two output ports (106b, 106e) positioned on the front face, a monitor port (106c) positioned on the front face, two

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visual indicators (at right end in Figure 7) to indicate the state of the circuitry, positioned on the front face and a power input connector (202) on the rear face. Pfeiffer et al. describes each module having circuitry linking the input and output ports on the rear face to each other and to the output ports on the front face, where two normal through paths each link on the rear input ports to one of the rear outputs and the circuitry defines patched paths each lining on the rear input ports to one the front output ports and one of the rear output ports to one of the front input ports (see Figures 1-9 and Columns 4-7). While Pfeiffer et al. does not specifically describe two input ports and two output ports on the rear face, Pfeiffer et al. does describe a double density module (200) that would inherently have such added ports. Further, Pfeiffer et al. describes a cable management arrangement (79) in the interior of the chassis to manage cables connected input and output ports of the front face.

6. Pfeiffer et al. does not describe a second monitor port on the front face. However, at the time of invention, it would have been obvious to one of ordinary skill in the art to use a second monitor port, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The motivation would have been to allow for monitoring of the separate circuits of Pfeiffer et al. to be monitored by different external components or systems.

7. Pfeiffer et al. does not specifically describe a cable management system in the interior of the chassis to manage cable connected to at the rear face. It would have been obvious to one of ordinary skill in the art to use such a system on the rear face, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

8. Pfeiffer et al. does not describe two switches on the front face of the module. Jennings et al. describes a switch (66) on the front face of a module to operate circuitry to switch between optical paths. Pfeiffer et al. and Jennings et al. are analogous art from the same field of optical module design. At the time of invention, it would have been obvious to one of ordinary skill in the art to use switches like that of Jennings to control the optical circuits in the module of Pfeiffer et al. The motivation for doing so would have been to allow for external manual control of the optical circuitry described by Pfeiffer et al. Therefore, it would have been obvious to one of ordinary skill in the art to combine Jennings et al. with Pfeiffer et al. to obtain the invention as presently claimed.

9. Regarding Claim 4, while Pfeiffer et al. does not describe the visual indicators as LED's, it appears that the indicators shown have the structure of LED's.

10. Regarding Claim 5, Jennings describes the switch as a toggle switch (66).

11. Regarding Claim 6, Pfeiffer et al. further describes the ports as fiber optical adapters (106, 110).

12. Regarding Claim 7, Pfeiffer et al. further describes the ports having openings (80) for fiber pigtails.

13. Regarding Claim 8, Pfeiffer et al. further describes the circuitry 2x2 optical switches (see Column 5).

14. Regarding Claim 9, Pfeiffer et al. describes a fiber optic connection panel having a chassis (70) defining an interior and a plurality of circuit modules (10) mounted in the chassis having an input port (110b) positioned on a rear face (94), an output port (110a) positioned on the rear face, an input port (106a, 106d) positioned on a front face (92), an output port (106b,

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106e) positioned on the front face, a monitor port (106c) positioned on the front face, and a power input connector (202) on the rear face. Pfeiffer et al. describes each module having circuitry linking the input and output ports on the rear face to each other and to the output ports on the front face, where two normal through paths each link on the rear input ports to one of the rear outputs and the circuitry defines patched paths each lining on the rear input ports to one the front output ports and one of the rear output ports to one of the front input ports (see Figures 1-9 and Columns 4-7). Further, Pfeiffer et al. describes a cable management arrangement (79) in the interior of the chassis to manage cables connected input and output ports of the front face.

15. Pfeiffer et al. does not specifically describe a cable management system in the interior of the chassis to manage cable connected to at the rear face. It would have been obvious to one of ordinary skill in the art to use such a system on the rear face, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

16. Pfeiffer et al. does not describe a switch on the front face of the module. Jennings et al. describes a switch (66) on the front face of a module to operate circuitry to switch between optical paths. Pfeiffer et al. and Jennings et al. are analogous art from the same field of optical module design. At the time of invention, it would have been obvious to one of ordinary skill in the art to use switches like that of Jennings to control the optical circuits in the module of Pfeiffer et al. The motivation for doing so would have been to allow for external manual control of the optical circuitry described by Pfeiffer et al. Therefore, it would have been obvious to one of ordinary skill in the art to combine Jennings et al. with Pfeiffer et al. to obtain the invention as presently claimed.

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17. Regarding Claim 12, describes visual indicators (at right end in Figure 7). While Pfeiffer et al. does not describe the visual indicators as LED's, it appears that the indicators shown have the structure of LED's.

18. Regarding Claim 13, Jennings describes the switch as a toggle switch (66).

19. Regarding Claim 14, Pfeiffer et al. further describes the ports as fiber optical adapters (106, 110).

20. Regarding Claim 15, Pfeiffer et al. further describes the ports having openings (80) for fiber pigtails.

21. Regarding Claim 16, Pfeiffer et al. further describes the circuitry 2x2 optical switches (see Column 5).

22. Regarding Claim 17, Pfeiffer et al. describes a fiber optic module having a module housing (70) with an input port (110b) positioned on a rear face (94), an output port (110a) positioned on the rear face, two input ports (106a, 106d) positioned on a front face (92), two output ports (106b, 106e) positioned on the front face, a monitor port (106c) positioned on the front face, and a power input connector (202) on the rear face. Pfeiffer et al. describes each module having circuitry linking the input and output ports on the rear face to each other and to the output ports on the front face, where two normal through paths each link on the rear input ports to one of the rear outputs and the circuitry defines patched paths each lining on the rear input ports to one the front output ports and one of the rear output ports to one of the front input ports (see Figures 1-9 and Columns 4-7). Further, Pfeiffer et al. describes the module having opposing flanges (114) configured to mount the module to a bulkhead (shown in Figure 5) in the interior of the chassis. While Pfeiffer et al. does not specifically describe two input ports and

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two output ports on the rear face, Pfeiffer et al. does describe a double density module (200) that would inherently have such added ports.

23. Pfeiffer et al. does not describe a second monitor port on the front face. However, at the time of invention, it would have been obvious to one of ordinary skill in the art to use a second monitor port, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The motivation would have been to allow for monitoring of the separate circuits of Pfeiffer et al. to be monitored by different external components or systems.

24. Pfeiffer et al. does not describe two switches on the front face of the module. Jennings et al. describes a switch (66) on the front face of a module to operate circuitry to switch between optical paths. Pfeiffer et al. and Jennings et al. are analogous art from the same field of optical module design. At the time of invention, it would have been obvious to one of ordinary skill in the art to use switches like that of Jennings to control the optical circuits in the module of Pfeiffer et al. The motivation for doing so would have been to allow for external manual control of the optical circuitry described by Pfeiffer et al. Therefore, it would have been obvious to one of ordinary skill in the art to combine Jennings et al. with Pfeiffer et al. to obtain the invention as presently claimed.

25. Regarding Claim 18, Pfeiffer et al. further describes two visual indicators (at right end in Figure 7) positioned on the front face to indicate the state of the circuitry.

Response to Arguments

26. Applicant's arguments filed December 14, 2006 have been fully considered but they are not persuasive.

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27. Applicant argues that it would not have been obvious to duplicate the cable management arrangement of the front face of Pfeiffer et al. at the back face because the modules of Pfeiffer et al. extend the entire depth of the chassis. However, it would have been obvious to one of ordinary skill in the art to duplicate the entire chassis opening structure, including the chassis wall extensions past the module faces (as shown at the front face in Figure 5).

28. Applicant also argues that the flanges of Pfeiffer et al. do not attach to a bulkhead because at least one of the flanges attach to the side of the chassis. The examiner notes, however, that the central support and the flanges at the sides of the chassis (shown in Figure 5) form a bulkhead to which the modules flanges (114) are attached.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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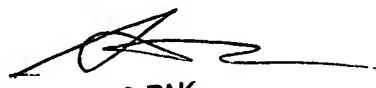
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jerry T Rahll



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PRIMARY EXAMINER